

In the Claims:

Please amend the claims as follows:

Claim 1 (Currently amended) A sub-sea controller ~~(31)~~ located under the sea level for managing a plurality of tools in a sub-sea well installation, the sub-sea controller ~~(31)~~ comprising:

- downloading means to download an application module ~~(35<sub>a</sub>)~~ to the sub-sea controller ~~(31)~~; and
- a virtual machine ~~(36)~~ to execute the downloaded application module ~~(35<sub>a</sub>)~~.

Claim 2 (Currently amended) The sub-sea controller ~~(412)~~ according to claim 1, further comprising:

- a native application ~~(47)~~ implemented within the sub-sea controller ~~(412)~~; and
- a native interface ~~(48)~~ implemented within the sub-sea controller ~~(412)~~, the native interface ~~(48)~~ enabling the application module ~~(45<sub>a</sub>)~~ to access the native application ~~(47)~~.

Claim 3 (Currently amended) The sub-sea controller ~~(412)~~ according to claim 2, wherein the native interface ~~(48)~~ enables the native application ~~(47)~~ to access the application module ~~(45<sub>a</sub>)~~.

Claim 4 (Currently amended) The sub-sea controller ~~(412)~~ according to ~~any one of claims 2-4~~ claim 2, further comprising:

- a native memory wherein the native application ~~(47)~~ is executed; and
- a defined memory wherein the application module ~~(45<sub>a</sub>)~~ is executed, the defined memory being distinct from the native memory.

Claim 5 (Currently amended) The sub-sea controller ~~(412)~~ according to ~~any one of claims 2-4~~ claim 2, further comprising:

- a protection register, the protection register authorizing an access to the native application only if a key code is written hereinto;

accessing means to access the protection register from the application module.

Claim 6 (Currently amended) The sub-sea controller (45<sub>a</sub>) according to ~~any one of claims 1 to 5 of claim 1~~ wherein the application module (45<sub>a</sub>) contains a driver for a tool.

Claim 7 (Currently amended) A sub-sea well installation comprising a sub-sea controller (31) according to ~~any one of claims 1 to 6 claim 1~~.

Claim 8 (Currently amended) A method for updating a software of a sub-sea controller (31) located under the sea level, the sub-sea controller (31) managing a plurality of tools in a sub-sea well, the method comprising:

- downloading an application module (35<sub>a</sub>) into the sub-sea controller (31); and
- executing the application module (35<sub>a</sub>) using a virtual machine (36) implemented within the sub-sea controller (31).

Claim 9 (Currently amended) The method according to claim 8, further comprising:

- executing a native application (47) of the sub-sea controller (42) within the sub-sea controller (412);
- executing a native interface within the sub-sea controller (412);
- accessing the native interface from the native application (47) to exchange data with the application module (45<sub>a</sub>).

Claim 10 (Currently amended) The method according to claim 8, further comprising:

- executing a native application (47) of the sub-sea controller (42) within the sub-sea controller (412);
- executing a native interface within the sub-sea controller (412);
- accessing the native interface from the application module (45<sub>a</sub>) to exchange data with the native application (47).

Claim 11 (Currently amended) The method according to ~~any one of claims 9 or 10 in claim 9~~, wherein the downloading and the executing of the application module (45<sub>a</sub>) are

performed without interrupting an executing of the native application of the sub-sea controller (412).

Claim 12 (Currently amended) The method ~~according to any one of claims 9 to 11 of~~ claim 9, further comprising:

- executing the application module (45<sub>a</sub>) in a defined memory;
- executing the native application (45<sub>b</sub>) in a native memory;
- wherein the defined memory is distinct from the native memory.

Claim 13 (Currently amended) The method ~~according to anyone of claims 8 to 13 of~~ claim 8 wherein the application module (45<sub>a</sub>) contains a driver for a tool.